APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/917,830	07/31/2001	Ken'ichi Shimooka	TSM-15	1719

7590   07/12/2004

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EXAMINER
MASKULINSKI, MICHAEL C

ART UNIT	PAPER NUMBER
2113	

DATE MAILED: 07/12/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE _3_ MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed
  after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any
  earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on _31 July 2001_.

2a)☐ This action is **FINAL.**   2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is
    closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) _1-11_ is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) _1-11_ is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on _31 July 2001_ is/are: a)☒ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☒ All   b)☐ Some * c)☐ None of:

    1.☒ Certified copies of the priority documents have been received.

    2.☐ Certified copies of the priority documents have been received in Application No. _____.

    3.☐ Copies of the certified copies of the priority documents have been received in this National Stage
        application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
   Paper No(s)/Mail Date _4_.

4) ☐ Interview Summary (PTO-413)
   Paper No(s)/Mail Date. _____ .

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____ .

Non-Final Office Action

Specification

1.   The title of the invention is not descriptive. A new title is required that is clearly

indicative of the invention to which the claims are directed.

Claim Rejections - 35 USC § 112

2.   The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly
> claiming the subject matter, which the applicant regards as his invention.

3.   Claim 5 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite

for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention.

4.   Claim 5 recites the limitation "said failure data control software" in lines 8-9.

There is insufficient antecedent basis for this limitation in the claim. It is unclear as to

what the failure data control software even is. For purposes of Examination this claim

will not be examined, until appropriate correction is made.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by
> another filed in the United States before the invention by the applicant for patent or (2) a patent
> granted on an application for patent by another filed in the United States before the invention by the
> applicant for patent, except that an international application filed under the treaty defined in section
> 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1-3 and 7-9 are rejected under 35 U.S.C. 102(e) as being anticipated by

Armstrong et al., U.S. Patent 6,691,146 B1.

Referring to claims 1 and 7:

a.   In the Abstract, Armstrong et al. disclose a partition manager for managing

logical partitions in a computer system (a computing system in which a plurality

of OSs run on hardware of one computer).

b.   In column 5, lines 4-7, Armstrong et al. disclose that the operating system

kernel includes task support, synchronization primitives, main storage

management, heap management, an I/O subsystem, and a user interface

(management agents that are respectively executed on the OSs, to manage said

OSs).

c.   In column 5, lines 36-57, Armstrong et al. disclose a partition manager that

provides the low-level control of the computer system. The partition manager

includes task support, synchronization primitives, main storage management,

heap management, an I/O subsystem, and a user interface (a partitioning control

unit that holds partition configuration information indicating a relation between

each OS and the hardware, and controls allocation of the hardware to each OS).

d.   In column 5, lines 58-62, Armstrong et al. teach a hardware data collection

unit that collects data on the hardware.

e.   In column 6, lines 6-8, Armstrong et al. disclose that the management of

system resources manages system-wide resources that need to be shared

between logical partitions (said computing system uses said partition

configuration information to perform hardware management for each OS).

Referring to claims 2 and 8, in Figure 3 and in column 5, lines 58-62, Armstrong

et al. teach management consoles for performing data collection. In column 6, lines 3-

6, Armstrong et al. disclose interrupt handling that provides a mechanism for handling

interrupts in a computer system (failure data reception). In column 6, lines 6-8,

Armstrong et al. disclose that the management of system resources manages system-

wide resources that need to be shared between logical partitions (control of said

computer on which a plurality of OSs run).

Referring to claims 3 and 9:

a.   In column 5, lines 47-51, Armstrong et al. disclose that the partition

manager performs the requested functions of the partitions as needed (when one

of said management agents receives a request from one of said management

consoles for acquisitions of hardware configuration information, the management

agent notifies said request to said partitioning control unit).

b.   In column 5, lines 51-54, Armstrong et al. disclose that the partition

manger typically does not know the services provided by the operating system,

or how to invoke them, so the services must be provided by the partition

manager, itself. Further, in column 6, lines 6-8, Armstrong et al. disclose that the

partition manager manages system-wide resources that need to be shared

between logical partitions (the partitioning control unit, which has been notified of

said request, acquires the data on said hardware from said hardware data

collection unit, and extracts requested information on hardware using said

partition configuration information, to send said information extracted to said

management agent).

c.   In Figure 3 and in column 5, lines 58-62, Armstrong et al. teach that the

management agent notifies the information received from the partitioning control

unit to the management consoles.

Claim Rejections - 35 USC § 103

7.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set
> forth in section 102 of this title, if the differences between the subject matter sought to be patented and
> the prior art are such that the subject matter as a whole would have been obvious at the time the
> invention was made to a person having ordinary skill in the art to which said subject matter pertains.
> Patentability shall not be negatived by the manner in which the invention was made.

8.   Claims 4 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Armstrong et al., U.S. Patent 6,691,146 B1, and further in view of Edwards et al., US

2002/0124201 A1.

Referring to claims 4 and 10, in column 6, lines 3-5, Armstrong et al. disclose that

the partition manager has interrupt handling that provides a mechanism for handling

interrupts in a computer system. However, Armstrong et al. don't explicitly disclose that

the partitioning control unit notifies said failure data to management agents

corresponding to OSs allocated with said piece of the hardware in which the failure has

occurred; and said management agents notified of said failure data to said management

consoles. In paragraph 0007, Edwards et al. disclose a method and system that

comprises recording the log repair action on one of the plurality of partitions. The

method and system further include sending the recording of the log repair action to a

single log repair action source, the recording including the log repair action and the

partition identifier of the one of the plurality of partitions. The method and system further

includes sending the log repair action to each of the other of the plurality of partitions

from the single service. It would have been obvious to one of ordinary skill at the time

of the invention to include the fault notifier of Edwards et al. into the system of

Armstrong et al. A person of ordinary skill in the art would have been motivated to

make the modification because *each receiving partition uses the broadcast information*

to update its log repair action record. Accordingly shortened repair scenarios and les

interruption to actively working partitions is provided (see Edwards et al.: paragraph

0008).

9.   Claims 6 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over

Armstrong et al., U.S. Patent 6,691,146 B1, and further in view of Mori et al., US

2002/0013802 A1.

Referring to claims 6 and 11, in column 6, lines 3-5, Armstrong et al. disclose that

the partition manager has interrupt handling that provides a mechanism for handling

interrupts in a computer system. However, Armstrong et al. don't explicitly disclose

when one of said management agents detects an occurrence of a failure in software,

said management agent notifies the failure data to said partitioning control unit; said

partitioning control unit performs control of reallocation of the hardware allocated to

each OS, and/or performs activation control for each OS, based on said failure data. In

paragraph 0018, Mori et al. disclose a resource allocation method that, upon detection

of abnormal stop of the active OS, deallocates resources having been used by the active OS, and allocates the resources to the standby OS. It would have been obvious to one of ordinary skill at the time of the invention to include the reallocation of resources of Mori et al. into the system of Armstrong et al. A person of ordinary skill in the art would have been motivated to make the modification because makes the system more fault tolerant and provides a means of failover (see Mori et al.: Abstract).

Conclusion

10.   The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 5,805,790	Nota et al.
US 2002/0052914 A1	Zalewski et al.
US 2002/0087611 A1	Tanaka et al.
US 2002/0124213 A1	Ahrens, Jr. et al.
US 2002/0184576 A1	Arndt et al.
US 2002/0194437 A1	Kapoor et al.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael C Maskulinski whose telephone number is (703) 308-6674. The examiner can normally be reached on Monday-Friday 9:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Robert W Beausoliel can be reached on (703) 305-9713. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the

Patent Application Information Retrieval (PAIR) system. Status information for

published applications may be obtained from either Private PAIR or Public PAIR.

Status information for unpublished applications is available through Private PAIR only.

For more information about the PAIR system, see http://pair-direct.uspto.gov. Should

you have questions on access to the Private PAIR system, contact the Electronic

Business Center (EBC) at 866-217-9197 (toll-free).

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PRIMARY EXAMINER